This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A method of providing real-time decision support in the review of physiological data, the method comprising:

establishing a library of interpreted physiological data records;

gathering the physiological data;

interpreting the physiological data based on a predetermined set of criteria ~~to generate an~~such that a separate interpretation is generated, wherein the interpreting step includes:

measuring the physiological data~~,~~;

analyzing a set of characteristics associated with the physiological data~~,~~;

extracting one or more patterns from the physiological data to generate the separate interpretation; and

comparing the ~~extracted patterns~~separate interpretation from the physiological data to a set of known patterns;

correlating the separate interpretation to one or more of the physiological data records in the library of physiological data records; and

displaying the interpretation and the correlated physiological data records on a display.

2.   (Original) A method as claimed in claim 1, further comprising:

establishing a communications link to an expert location;

transmitting information concerning the interpretation to the expert location; and

displaying a communication from the expert location on the display.

3.   (Original) A method as claimed in claim 2, wherein transmitting information concerning the interpretation includes transmitting a text message.

4.   (Original) A method as claimed in claim 2, wherein transmitting information concerning the interpretation includes transmitting a voice message.

5.   (Canceled)

6.   (Previously Presented) A method as claimed in claim 1, further comprising determining whether the extracted patterns match one or more patterns in the set of known patterns.

7.   (Previously Presented) A method as claimed in claim 1, further comprising:
        creating a library of education materials; and
        displaying a predetermined portion of the education materials on the display.

8.   (Original) A method as claimed in claim 1, further comprising displaying a message based on the interpretation on the display.

9.   (Original) A method as claimed in claim 1, further comprising displaying the physiological data on the display.

10.   (Currently Amended) A physiological data interpretation system comprising:
a library of physiological data records;
        a physiological data acquisition device capable of acquiring physiological data and coupled to the library of physiological data records, the acquisition device having an interpretation module to generate an separate interpretation of the physiological data and a correlation module to compare the separate interpretation to the records in the library of physiological records and determine a set of correlated data records, wherein the

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interpretation module is configured to measure the physiological data, analyze a set of characteristics associated with the physiological data, and extract one or more patterns from the physiological data to generate the separate interpretation; and

an output device coupled to the acquisition device.

11. (Original) A system as claimed in claim 10, wherein the output device is a display.

12. (Original) A system as claimed in claim 10, further comprising
an expert location coupled to the acquisition device.

13. (Original) A system as claimed in claim 12, wherein the expert location is a portal.

14. (Original) A system as claimed in claim 12, wherein the acquisition device includes an information filter.

15. (Original) A system as claimed in claim 12, wherein the acquisition device includes a communications module capable of transmitting messages to and receiving messages from the expert location.

16. (Original) A system as claimed in claim 15, wherein the messages include text information.

17. (Original) A system as claimed in claim 15, wherein the messages include voice information.

18. (Original) A system as claimed in claim 10, further comprising a server coupled to the acquisition device, and wherein the library of physiological records is located on the server.

19.   (Original) A system as claimed in claim 10, further comprising a library of supplemental materials coupled to the acquisition device.

20.   (Original) A system as claimed in claim 10, wherein the library of physiological data records includes ECG data.

21.   (Original) A system as claimed in claim 10, wherein the acquisition device is an ECG acquisition device.

22.   (Original) A system as claimed in claim 10, wherein the acquisition device includes a browser.

23.   (Original) A system as claimed in claim 10, wherein the interpretation includes at least one textual message.

24.   (Original) A system as claimed in claim 10, wherein the acquisition module includes a confirmation module to confirm the integrity of the physiological data.

25.   (Currently Amended) A method of interpreting physiological data, the method comprising:

acquiring physiological data;

interpreting the physiological data based on a predetermined set of criteria ~~to generate an~~such that a separate interpretation is generated, wherein the interpreting step includes~~:~~

measuring the physiological data~~,~~;

analyzing a set of characteristics associated with the physiological data~~,~~;

checking the integrity of the acquired physiological data by extracting one or more patterns from the physiological data~~,~~ to generate the separate interpretation; and

comparing the ~~extracted patterns~~separate interpretation from the physiological

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data to a set of known patterns;

correlating the separate interpretation to one or more physiological data records in a library of physiological data records; and

displaying the interpretation and the correlated physiological data records on a display.

26.   (Original) A method as claimed in claim 25, further comprising:
establishing a library of interpreted physiological data records.

27.   (Original) A method as claimed in claim 25, further comprising:
establishing a communications link to an expert location;
transmitting information concerning the interpretation to the expert location; and
displaying a communication from the expert location on the display.

28.   (Original) A method as claimed in claim 27, wherein transmitting information concerning the interpretation includes transmitting a text message via instant messaging.

29.   (Original) A method as claimed in claim 27, wherein transmitting information concerning the interpretation includes transmitting a voice message via voice-based instant messaging.

30. (Canceled)

31.   (Original) A method as claimed in claim 25, further comprising:
creating a library of supplemental materials; and
displaying some of the supplemental materials on the display.